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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/320,252	05/26/1999	PAUL EVAN MATZ	0295.??.33	4390

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EXAMINER
ENGLAND, DAVID E

ART UNIT	PAPER NUMBER
2...	

DATE MAILED: 12/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
	09/320,252	MATZ ET AL.
Office Action Summary	Examiner	Art Unit	
	David E. England	2143	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 September 2005*.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1, 5, 7 – 13, 15, 19, 20 and 24 – 27* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1, 5, 7 – 13, 15, 19, 20 and 24 – 27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

1.   Claims 1, 5, 7 – 13, 15, 19, 20 and 24 – 27 are presented for examination.

Claim Rejections - 35 USC § 103

2.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

3.   Claims 1, 7 – 13, 15, 19, 20 and 24 – 27 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Sundaresan (6289369) in view of Maresco (6418458) in further view of Szlam

et al. (6314089) (hereinafter Szlam).

4.   Referencing claim 1, Sundaresan teaches a method of executing a transaction task within

a transaction processing system, the method including:

5.   responsive to an event, identifying a workflow associated with the event, (e.g. col. 2, line

48 – col. 3, line 9 & col. 3, lines 22 – 37); and

6.   identifying a processor affinity attributed to the task, (e.g. col. 4, line 63 – col. 5, line 29);

7.   assigning the available thread to a processor within the multiprocessor system according

to the processor affinity attributed to the task, (e.g. col. 3, line 55 – col. 4, line 14 & col. 8, line

48 – col. 9, line 19);

8.   distributing the task, that at least partially executes the workflow, from a task queue to an

available thread within a pool of threads operating within a multiprocessor system, (e.g. col. 5,

line 49 – col. 6, line 7, *"central queue, local queue(s)"*);

9.   wherein the event comprises a transaction event, (e.g. col. 5, lines 30 – 48).

10.   Sundaresan does not specifically teach the distributing of the task to the available thread

being responsive to dynamically assigning a new priority to the task; and

11.   the task comprises a transaction routing task, responsive to a transaction request

associated with the transaction event, that routes the transaction request to an agent of the

transaction processing system.

12.   Maresco teaches teach the distributing of the task to the available thread being responsive

to dynamically assigning a new priority to the task, (e.g. col. 3, lines 37 – 67 & col. 4, lines 16 –

56). It would have been obvious to one skilled in the art at the time the invention was make to

combine Maresco with Sundaresan because if a new task that has a higher priority enters a

queue, it would be advantageous to the system to address the new task first in the thread so the

system can utilize the important result of the finished thread.

13.   Szlam teaches the task comprises a transaction routing task, responsive to a transaction

request associated with the transaction event, that routes the transaction request to an agent of the

transaction processing system, (e.g. col. 21, lines 1 – 19). It would have been obvious to one

skilled in the art at the time the invention was make to combine Szlam with the combine system

of Sundaresan and Maresco because if a transaction task needed a resource that an agent

possessed the transaction task could request it from the agent therefore aiding in the completion

of the task.

14.   As per claim 7, Sundaresan does not specifically teach assigning the available thread to a

processor within the multiprocessor system according to a thread priority. Maresco teaches

assigning the available thread to a processor within the multiprocessor system according to a

thread priority, (e.g. col. 3, lines 37 – 67 & Fig. 1). It would have been obvious to one skilled in

the art at the time the invention was make to combine Maresco with Sundaresan because of

similar reasons stated above and if a thread that has important information that other threads rely

on does not get processed first it could cause errors in the system.

15.   As per claim 8, Sundaresan does not specifically teach assigning the thread priority to the

available thread based on a priority, of the task distributed to the available thread. Maresco

teaches assigning the thread priority to the available thread based on a priority, of the task

distributed to the available thread, (e.g. col. 4, lines 16 – 56). It would have been obvious to one

skilled in the art at the time the invention was make to combine Maresco with Sundaresan

because of similar reasons stated above and if an incoming task that is important, needs to be

completed first, it could be sent to the next available thread within the pool of threads therefore,

causing the thread to have the same priority as the task therefore having the task be processed

sooner.

16.   As per claim 24, Sundaresan teaches determining a best match between the task and the

available thread, (e.g. col. 3, line 55 – col. 4, line 16).

17.   As per claim 25, Sundaresan teaches the available thread is a member of a class of

threads that are included in the pool of threads, (e.g. col. 6, lines 8 – 29 & col. 8, line 48 – col. 9,

line 4) although does not specifically teach threads associated with the priority. Maresco teaches

threads associated with the priority, (e.g. col. 4, lines 16 – 56). It would have been obvious to one

skilled in the art at the time the invention was make to combine Maresco with Sundaresan

because of similar reasons stated above.

18.   Claims 9 – 13, 15, 19, 20, 26 and 27 are rejected for similar reasons as stated above.

19.   Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sundaresan,

Maresco and Szlam as applied to claim 1 above, and in further view of Sequeira (6222530).

20.   As per claim 5, Sundaresan and Maresco do not specifically teach wherein the task has a

real-time priority and is distributed in accordance with the real-time priority to the available

thread within the pool of threads. Sequeira teaches wherein the task has a real-time priority and

is distributed in accordance with the real-time priority to the available thread within the pool of

threads, (e.g. col. 5, line 46 – col. 6, line 6 & col. 9, lines 16 – 31). It would have been obvious to

one skilled in the art at the time the invention was make to combine Sequeira with the combine

system of Sundaresan, Maresco and Szlam because if an incoming task that is important, needs

to be completed first, it could be sent to the next available thread within the pool of threads

before the other tasks and be processed sooner.

Response to Arguments

21.   Applicant's arguments filed 09/08/2005 have been fully considered but they are not
persuasive.

22.   In the Remarks, Applicant argues in substance that the proposed modification of
Sundaresan based on Szlam renders the Sundaresan unsatisfactory for its intended purpose.
Sundaresan describes a central schedule queue that may schedule a thread for execution on any
available processor in a multi-processor computer system, (col. 8, lines 14 – 27). In contrast,
Szlam describes a Composite Call Object that specifies the location where the composite Call
Object is to execute. It follows that the invention described by Sundaresan would be
unsatisfactory for its intended purpose if modified based on the invention described in Szlam
because the schedule queues described in Sundaresan would contend with the Composite Call
Object described in Szlam for selection of the location of execution.

23.   As to part 1, Examiner would like to draw the Applicant's attention to the rejection
above. In which one can see that Szlam is only utilized for the teachings of responsive to a
transaction request associated with the transaction event, that routes the transaction request to <u>an</u>
<u>agent</u> of the transaction processing system. A recitation of the intended use of the claimed
invention must result in a structural difference between the claimed invention and the prior art in
order to patentably distinguish the claimed invention from the prior art. If the prior art structure
is capable of performing the intended use, then it meets the claim.

24.   For all other arguments, Applicant's arguments fail to comply with 37 CFR 1.111(b)

because they amount to a general allegation that the claims define a patentable invention without

specifically pointing out how the language of the claims patentably distinguishes them from the

references.

Conclusion

25.   The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure.

26.   a.   Smith et al. U.S. Patent No. 6721778 discloses Unscheduled event task processing

system.

27.   b.   Atkinson et al. U.S. Patent No. 6192121 discloses Telephony server application

program interface API.

28.   c.   Donaghue, Jr. U.S. Patent No. 6226377 discloses Prioritized transaction server

allocation.

29.   d.   Kelly U.S. Patent No. 5999965 discloses Automatic call distribution server for

computer telephony communications.

30.   e.   Blelloch et al. U.S. Patent No. 6434590 discloses Methods and apparatus for

scheduling parallel processors.

31.   f.   Williams U.S. Patent No. 6411982 discloses Thread based governor for time

scheduled process execution.

32.   Applicant's amendment necessitated the new ground(s) of rejection presented in this

Office action, (changing the scope of the claims by adding dependent claims to the independent

claim). Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is

reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this

final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to David E. England whose telephone number is 571-272-3912.

The examiner can normally be reached on Mon-Thur, 7:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, David A. Wiley can be reached on 571-272-3923. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

David E. England
Examiner
Art Unit 2143

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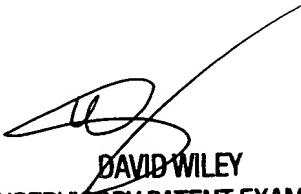
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